Summary
Coastal Storms Program Scoping Meeting
Biloxi, MS
March 14th and 15th

Brief Background:
The National Oceanic and Atmospheric Administration's (NOAA) Coastal Storms Program (CSP) is starting a new pilot in the Northern Gulf of Mexico along the Mississippi/Alabama coast. On March 14th and 15th, 2007, CSP held two scoping meetings to determine what gaps exist in mitigating the impacts of coastal storms on the local communities and environment. The March 14th meeting included attendees from Gulf of Mexico Sea Grant offices while the March 15th meeting was a broader group of federal, state, and local agencies, universities, and the private sector.

At each meeting, attendees provided input on what they viewed as the most significant hindrances to mitigating the impacts of coastal storms. Discussions centered around five issue areas - mitigation/planning, risk assessment, forecasting/observations, response, and recovery.

March 14th Summary

Attendees:
In addition to the CSP team, representatives from both NOAA's Coastal Services Center and NOAA's Gulf Coast Services Center were in attendance, along with representatives from the Texas, Mississippi, Alabama, and Louisiana Sea Grant offices.

Key Issues:
Numerous ideas were put forth regarding what is needed to mitigate the impacts of coastal storms. The need for better communications, however, quickly emerged as a key need. Be it interagency communications, communicating what tools are already available, or vehicles to inform and educate the public on the meaning of different data, the need for improved communications were consistently seen as a gap. Specific gaps were identified by the attendees, such as the need to identify how users prefer to access information; educating users regarding how to use the information and what the information means; more clearly defining roles for individuals and organizations involved with response and recovery; and better, more robust communication between NOAA and Sea Grant.

Several other ideas were repeatedly mentioned. One was the need to have pre-storm maps, photos, and related information so that after a storm hits, losses can be clearly demonstrated and assessed. In addition, the identification of evacuation routes and evacuation assessments (what worked well, what did not) were seen as critical.

March 15th Summary

Attendees:

The March 15th meeting had 54 attendees, including representatives from FEMA, the EPA, USGS, several Sea Grant offices, and other NOAA offices. Emergency managers from several states and local communities, including the specific pilot region of Alabama and Mississippi, were in attendance, as well as community, county, and state planners and managers, representatives from the chambers of commerce, university scientists, and the Navy, among others.

Key Issues:
Many of the same themes mentioned by the Sea Grant attendees on March 14th were echoed by the March 15th attendees. Communications was again the major concern, with attendees highlighting numerous needs, such as:

Emergency Management and Recovery Planning

- Better coordination between agencies and managers before and after a storm so efforts are not duplicated and the outcome is amplified, especially for debris removal.
- Community education on their emergency management and recovery plans with regards to what information is inadequate/lacking and how to remedy the problem.
- Outreach focusing on getting the right information in local officials' hands.
- Emphasis on how short-term plans and long-term plans for recovery sync up.

Models and Mapping

- Communications between agencies and managers detailing areas likely to experience damage and how severe the damage.
- Outreach on how to effectively interpret models and maps and mitigate potential damage.

Outreach and Extension

- Training on how to effectively use available information for storm planning, preparedness, and mitigation.
- Determine how citizens get their information on storm hazards and tailor the outreach through those avenues (e.g., community groups, churches, chambers of commerce, etc).
- Businesses should be informed of how they can help each other to prepare for and quickly recover from a disaster so they are out of business for the least amount of time possible.

Another highlighted need was a single data resource where products and information are stored so decision makers can see what is available for use and the information is coordinated so it is easy to find and access. It would be especially beneficial if points of contact could be provided so decision makers would know who to go to when they have questions. This was drawn, in part, from the problem of having too many informational avenues providing multiple, sometimes conflicting, information.

As for specific tools, the main one repeatedly identified as a need was an adequate and complete storm surge model that takes into account wind, waves, and geography. If possible, it would be best to couple the model with riverine models.

Tools and information need to be quickly available and updated. Pre-storm information needs to be given as soon as possible and models and observations that produce real-time and predicted information need to be updated faster, even if not perfect, so responders have something to work off of. Similarly, post-storm information should quickly be made public and easy to access so evacuees can know when it is safe to return home.

March 14th and 15th Issue Area Discussions

Below is a summary of the discussions around each of the five issue areas on March 14 and 15.

Mitigation/Planning
Discussions centered on products that could be expanded and potential new products and services.

Products suggested include:

- An expansion of the National Severe Storms Laboratory rainfall runoff model.
- Land-use maps showing changes over time.
- Elevation maps.
- Updates and improvements to HURREVAC.
- A re-evaluation assessment of current tools in the region being used by locals with particular emphasis being placed on their usefulness and gaps. Determine if minor modifications can be made to improve effectiveness.
- Land use assessments at the parcel level to inform mitigation planning and permitting.
- Pre-storm damage estimates so aid can be targeted and easily and quickly dispensed.

Three new product and service ideas were also suggested and discussed:

- One, Sea Grant needs to be better engaged early in the development of new products so outreach can start early.
- Two, develop and construct a model 'Safer Storm Harbor' to demonstrate what is needed to create a harbor that is more resistant to storms, demonstrating what it costs and what actions need to take place.
- Three, assess the economic benefits of using ecosystems (wetlands, mangroves, etc.) as hazard buffers so quantitative values can be shown when arguing the importance of ecosystem conservation.

Risk Assessment
The main need discussed in this category is a desire for a model and/or decision support tool that provides 3-D visualizations of potential hazards along with the risks and scope of damage associated with these hazards.

Forecasting/Observations

The key needs identified include better observations (Alabama coastal buoy, tide gauges), a Website to integrate information on existing surge models, VDATUM, evacuation models (down to the municipal level), and wind wave models (Navy working a lot in this area).

Overall, maintenance of products and services was identified as critical so they do not deteriorate and reduce usefulness. In addition, the models and observations should be geared towards the user so they are in formats that can be easily used.

Response

The most significant need identified for this category is better coordination to examine post-event changes in water quality. The response needs to take place within the first 7 days after the storm to answer questions such as, 'is the drinking water safe?' or 'are the oysters healthy enough to eat?' Key issues include the need to identify where the contaminants came from, what they are, and what can be done to reduce their effects next time.

Better shoreline data and post-storm airborne imagery were also expressed needs.

Recovery

Two key needs came out of the recovery discussion.

- The need to assist communities practicing smart growth along the coast and near-shore areas (such as along highway 90 and Bay St. Louis).
- The creation of good baseline data sets and maps to establish actual impacts to built and natural environments (e.g. data, photos), including bathymetry and topography.

In addition to the above mentioned recovery needs, the region lacks

- Scientific data showing how the natural environment specifically helps with community resilience.
- Tools to help communities determine self-insurance availability.
- Partnerships with insurance companies to help set rates that are smart for development.
- Land-use change maps.